

## **REMARKS/ARGUMENTS**

### **1.) Listing of the Claims**

Claims 30-58 are pending in the application. Favorable reconsideration of the application is respectfully requested in view of the following remarks.

### **2.) Claim Rejections – 35 U.S.C. § 102(e)**

Examiner rejected claims 30 and 46 under 35 U.S.C. § 102(e) as being anticipated by Molnar, *et al.* (US 6,810,242 B2). While not conceding that the cited reference qualifies as prior art, but instead to expedite prosecution, Applicant has chosen to respectfully disagree and traverses the rejection as follows. Applicant reserves the right, for example, in a continuing application, to establish that the cited reference, or other references cited now or hereafter, does not qualify as prior art an invention embodiment previously, currently, or subsequently claimed.

Applicant respectfully submits that claims 30 and 46 are patentable because Molnar fails to disclose, expressly or inherently, each and every element of claims 30 and 46. For example, nothing in the cited passages of Molnar discloses, expressly or inherently, “switch devices coupled to the first mixer are arranged to be conductive for the first and/or the second state of the second mixing signal” and “switch devices coupled to the second mixer are arranged to be conductive for the first and/or the second state of the first mixing signal” (*emphasis added*), as recited in independent claim 30, as discussed herein. Claim 46 recites substantially similar elements.

According to pages 2-3 of the Final Office Action, Examiner is making the following mappings from Molnar to the aforementioned claim elements:

<b><u>Claim 30</u></b>	<b><u>Molnar</u></b>
“first mixer”	“subharmonic mixer 106”
“second mixer”	“subharmonic mixer 108”
“switch devices coupled to the first mixer”	“switching stage 184” (part of “mixer 106”)
“switch devices coupled to the second mixer”	not shown, but similar to “switching stage 184” (part of “mixer 108”)
“first mixing signal”	“LO-I or in-phase signal” (part of “mixer 106”)
“second mixing signal”	not shown, but similar to “LO-I or in-phase signal” (part of “mixer 108”)

Also, Examiner indicates that “fig. 2 showing the first mixer 106(fig. 1) for mixing RF-I, the second mixer 108 is arranged similar to the mixer 106 but not shown.” Even if the mappings are correctly made (a point that Applicant does not concede), the cited passages of Molnar still fail to disclose, expressly or inherently, the aforementioned claim elements since Molnar’s “LO-I or in-phase signal” of “mixer 106” simply does not control the operation of “switching stage 184” of “mixer 108.” In stark contrast, independent claim 30 explicitly recites “switch devices coupled to the first mixer are arranged to be conductive for the first and/or second state of the second mixing signal.” Also, Molnar’s “LO-I or in-phase signal” of “mixer 108” simply does not control the operation of “switching stage 184” of “mixer 106.” In stark contrast, independent claim 30 explicitly recites “switch devices coupled to the second mixer are arranged to be conductive for the first and/or the second state of the first mixing signal.”

Thus, for at least these reasons, Applicant respectfully submits that claims 30 and 46 are patentable. Applicant therefore respectfully requests that the rejection be withdrawn.

### **3.) Claim Rejections – 35 U.S.C. § 103 (a)**

Examiner rejected claims 30-58 under 35 U.S.C. § 103(a) as being unpatentable over Manku, *et al.* (US 6,639,477 B2) in view of Forgues (US 5,999,804). Applicant respectfully submits that claims 30-58 are patentable because Manku and Forgues, taken alone or in any permissible combination, fail to disclose, teach, or even suggest the elements of independent claims 30 and 46.

For example, nothing in the cited passages of Manku and Forgues, taken alone or in any permissible combination, disclose, teach, or even suggest, “switch devices coupled to the first mixer are arranged to be conductive for the first and/or the second state of the second mixing signal” and “switch devices coupled to the second mixer are arranged to be conductive for the first and/or the second state of the first mixing signal” (*emphasis added*), as recited in independent claim 30, as discussed herein. Claim 46 recites substantially similar elements.

In support of the rejection, page 4 of the Final Office Action cites FIG. 5A-5F and col. 5, line 49 – col. 7, line 12 of Manku as allegedly disclosing the aforementioned claim elements. It appears that Examiner is making the following mappings in support of his rejection:

<u>Claim 30</u>	<u>Manku</u>
"first mixer"	"passive mixer 530"
"second mixer"	"passive mixer 520"
"switch devices coupled to the first mixer"	"active mixer 540"
"switch devices coupled to the second mixer"	"active mixer 550"
"first mixing signal"	"I or in-phase signal"
"second mixing signal"	not explicitly shown

Also, Examiner indicates that "wherein the second mixer (520) is arranged similar to the first mixer (fig. 5a)." However, the cited passages of Manku (taken alone or in any permissible combination with Forgues) fail to disclose, teach, or even suggest the aforementioned claim elements because Manku's "I or in-phase signal" (which the Examiner attempts to analogize to the claimed "first mixing signal") are coupled to Manku's "passive mixers," which the Examiner analogizes to the claimed "first mixer" and "second mixer." Manku's "I or in-phase signal" simply does not affect the operation of Manku's "active mixers" (to which the Examiner analogizes to the claimed "switch devices). In stark contrast, the independent claims explicitly recite "switch devices coupled to the first mixer" are arranged to be conductive for the first and/or the second state of the second mixing signal" and "switch devices coupled to the second mixer are arranged to be conductive for the first and/or the second state of the first mixing signal" (*emphasis added*). Thus, for at least these reasons, Applicant respectfully submits that independent claims 30 and 46 (as well as all claims dependent therefrom) are patentable over Manku and Forgues, taken alone or in any permissible combination. Applicant therefore respectfully requests that the rejection be withdrawn.

**CONCLUSION**

In view of the foregoing remarks, Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. Applicant, therefore, respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance for all pending claims.

Applicant requests a telephonic interview if Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,

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Date: June 13, 2011

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